DOCUMENT RESUME

ED 190 825 CE 026 331

TITLE	Promoting Sex Equity in the Classroom. Module 11, Technical Education. Revised, 1980.
INSTITUTION	Iowa State Univ. of Science and Technology, Ames. Dept. of Home Economics Education.
SPONS AGENCY	Iowa State Dept. of Public Instruction, Des Moines. Div. of Career Education.
PUB DATE	80
NOTE	18p.; For related documents see CE 026 321-332.
EDRS PRICE	MF01/PC01 Plus Postage.
DESCRIPTORS	Art; Equal Education; Guidelines; *Industrial Arts; Language; Lesson Plans; Nonprint Media; Postsecondary Education; Secondary Education; *Sex Bias; *Sex Fairness; Sex Stereotypes; *Teaching Methods; Textbook Content; *Vocational Education

ABSTRACT

Designed to be used with modules 1 through 5, this eleventh in a series of twelve modules presents sex equity teaching strategies unique to the technical education classroom. Strategies are grouped by sex equity guideline categories: art, language, and content. In addition to specific strategies, instructional suggestions based on common strategies are adapted in an example lesson plan for both a secondary and postsecondary class. The module concludes with a sample media evaluation. (LRA)

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ED190825

CE 026 331

promoting
sex equity
in the classroom

technical education

Sex equity teaching strategies unique to technical education classroom use are presented in this module. Strategies are grouped by Sex Equity Guideline categories: art, language, and content. Instructional suggestions based on the common strategies in Module #2, #3, #4, are adapted in an example lesson plan for both a secondary and postsecondary class.

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11

Using Creative Strategies - Technical Education (T.ED.)
Module #11

This module is intended as an accompaniment to the first five modules. Its purpose is to help you adapt general strategies to promote sex equity contained in Modules #3, #4, and #5 for the vocational education discipline: Technical Education. Contents include specific strategies, lesson plans, and media evaluations.

Make sure you READ MODULE #1 before proceeding.

CHECK THE SYMBOL

After you have evaluated your media using the Sex Equity Check Sheet in Module #2 and have reviewed the general strategies for art, language, or content in Modules #3, #4, #5, you are ready to adapt strategies for your situation. Because discipline-specific strategies for art, language, and content are represented collectively in this module, symbols have been used to ease identification. Creative strategies to promote sex equity in art follow the "painter's brush," those in language follow the "pen and ink bottle," and those in content follow the "set of books." Use these symbols to help identify quickly the strategies of interest to you.

CONSIDER AN EXAMPLE

To better understand how a creative strategy can counteract the negative effects of bias in resource materials, review the lesson plans provided. The name of the school, teacher, and course title are identified on each plan. These plans have been implemented and each represents one teacher's ideas on how to adapt a strategy for his/her unique teaching needs. The Sex Equity Check Sheet used to evaluate media for the lesson accompanies the plan. Note the checks in the "Yes" and "No" columns for art, language, and content to interpret the teacher's evaluation of the equitability of the resource and the choice of creative strategy.

INDIVIDUALIZE YOUR PLAN

Consider the information contained in this module that is directly related to your discipline; integrate with information in the first five modules. Evaluate your teaching resources, then select and adapt the creative strategies that will help you PROMOTE SEX EQUITY IN THE CLASSROOM.

CREATIVE STRATEGIES

Promoting Sex Equity

Teacher Activities	Student Activities
Prepare a bulletin board featuring a flow chart illustrating both male and female students performing a sequence of events in examining an aircraft for its 1000 hour maintenance check.	
* * *	* * *
Illustrate various levels of competencies needed to work in an electronic specialist shop. Show possible success for both sexes.	
* * *	* * *
Provide handouts depicting females and males in roles requiring mechanical skill.	
* * *	* * *
Prepare a bulletin board with help wanted ads dealing with the employment area being taught in class. Lead discussion.	Discuss language used to describe positions and if females and males could do the job.
* * *	* * *
Lead discussion.	Discuss need to avoid using qualifiers as female mechanic when talking about people and their professions.
* * *	* * *
Check titles that are not gender free. Investigate and record appropriate gender-free titles in the 1977 Dictionary of Occupational Titles.	

CREATIVE STRATEGIES

Promoting Sex Equity

Teacher Activities	Student Activities
Examples: --motorcycle repairer for motorcycle repairman --press setter for pressman --lay-out worker for lay-out man.	
* * *	* * *
 Invite a male/female guest or student to demonstrate how each would perform an identical task. (This permits exploring use of different tools and/or techniques to reach the same goal.) Examples: --relationship of length of handle on tools to amount of torque applied --use of pneumatic or electric tools.	
* * *	* * *
Permit a selection of creative projects according to interests of students: Examples: --a gun rack or a jewelry box --a bread board or a game board --printing a program for a civic organization or printing protective covers for textbooks.	
* * *	* * *
Organize a field trip.	Observe people working in an electro-mechanical firm or heavy equipment repair shop. Note performance by workers of tasks learned in class. Interview these people to determine how they perceive their roles.

* * * * * *

Teacher Louis Cutwright
School Des Moines Area Community College
Discipline Technical Education
Course Title Heavy Duty Truck Repair

LESSON PLAN #1

UNIT: Trouble shooting hydraulic systems

LESSON TOPIC: Pressure testing power transmissions

OBJECTIVES:

The student will learn the theory behind pressure testing power transmissions.

INSTRUCTIONAL MEDIUM:

PRINT: Service manual

NONPRINT:

Guidelines No. Implemented

Art

Language 11 (See pp. 6-9)

Content

TEACHING TECHNIQUE: presentation and practice, discussion (with transparencies)

CREATIVE STRATEGY(IES) USED:
The instructor could continue to use sex equitable language. The student could monitor the instructor's lecture to find statements or words that are not sex equitable.

TEACHER PREPARATION: (Specific adaptation of strategy applied to class and objective.)

1. Review material in service manual on pressure testing.
2. Review hydraulic sequence operation.
3. Make transparencies of hydraulic systems diagrams.

CLASSROOM PROCEDURE:

TEACHER	STUDENT PARTICIPATION
1. With transparencies review oil flow in power transmission. 2. Cover materials in manual. 3. Discuss logic behind this approach to pressure testing.	<u>IN CLASS</u> Take notes and participate in discussion. <u>OUT OF CLASS</u>

MANAGEMENT TECHNIQUES, IF USED:

TEACHER REACTIONS: By avoiding the use of gender pronouns and inserting gender-free plural pronouns the effectiveness was good in that it did not stereotype men into a given mold. There was no adverse reaction from the students. The strategy promoted sex equity without changing the technical information.

SEX EQUITY CHECK SHEET

for Evaluating Print and Nonprint
Instructional Media: Vocational and Technical Education

(for Lesson Plan #1)

TITLE:

Service Manual

AUTHOR (producer):

Caterpillar Tractor Co.

Respond to each item on the check list by placing a (✔) in one of the columns on the right. Column choices include YES, NO, or NOT APPLICABLE (N/A). A check in the YES column denotes "Sex Equitable" for that item. Definitions which may clarify items contained in the check sheet follow:

Expanded Societal Role - a part played by an individual that is not bound by an organized traditional pattern of relationships.

Nonprint Instructional Medium - includes audible tapes, instructional pictures, slides and filmstrips, sound motion pictures, video tapes.

Nontraditional Occupation - jobs females or males enter which have been prescribed traditionally to the other sex.

Print Instructional Medium - includes laboratory manuals, transparencies, study guides, textbooks, programmed instruction books.

Sex Bias - prejudice based solely on sex exclusive of individual characteristics.

Sex Equitable - males and females presented in a balanced manner, impartially, showing like treatment.

ART WORK - ILLUSTRATIONS AND/OR PICTURES

	Yes	No	N/A
1. Does art work maintain a numerical balance between the sexes?			✓
2. Does art work depict alternately both females and males in dominance?			✓
3a. Are females depicted in nontraditional occupations?			✓
3b. Are males depicted in nontraditional occupations?			✓
4a. Does art work depict males and females equally in varied levels of occupational status?			✓
4b. Does art work depict females and males equally in varied levels of occupational responsibility?			✓
5a. Are males depicted using vocationally acquired skills in expanded societal roles?			✓
5b. Are females depicted using vocationally acquired skills in expanded societal roles?			✓
6a. Are females depicted in appropriate attire for their occupational roles?			✓
6b. Are males depicted in appropriate attire for their occupational roles?			✓
7a. Do illustrations of people include many body types?			✓
7b. Do illustrations of people include occasional evidence of handicaps?			✓

LANGUAGE - WRITTEN/SPOKEN

If the spoken word is involved, answer all questions on this page; if not respond only to first nine items.

		Yes	No	N/A
1.	Are titles of address indicating gender omitted?			✓
2a.	Are gender-free plural pronouns used?	✓		
2b.	Is there an equal balance of gender-specific singular pronouns?			✓
3.	Are gender-free nouns substituted for gender pronouns?	✓		
4.	Are gender-free nouns used to denote all human beings?	✓		
5.	Do indefinite pronouns have a plural pronoun referent (thus avoiding use of singular gender pronouns, e.g., he/she, her/his)?	✓		
6.	Are sex-free occupational titles used as indicated in the 1977 Dictionary of Occupational Titles, fourth edition?		✓	
7.	Is reference made to physical appearance only when there is a purpose?			✓
8.	Is each occupation described as being performed by both sexes?		✓	
9.	Are nondemeaning descriptions of people used?			✓

LANGUAGE - SPOKEN

10a.	Is a range of emotions expressed by a female speaker(s)?			✓
10b.	Is a range of emotions expressed by a male speaker(s)?	✓		
11a.	Do male vocal presentations communicate the intended message avoiding sex-biased connotations?	✓		
11b.	Do female vocal presentations communicate the intended message avoiding sex-biased connotations?			✓
12a.	Are titles of address indicating feminine gender used only if speaker prefers?			✓
12b.	Are titles of address indicating masculine gender used only if speaker prefers?			✓

CONTENT - EXPLICIT AND/OR SUBTLE

The technical information eliminated sex bias.

	Yes	No	N/A
1a. Are females portrayed in a variety of occupations?			✓
1b. Are males portrayed in a variety of occupations?			✓
2a. Are males portrayed in a range of societal roles?			✓
2b. Are females portrayed in a range of societal roles?			✓
3a. Do females portray a range of emotions?			✓
3b. Do males portray a range of emotions?			✓
3c. Do males portray a range of values?			✓
3d. Do females portray a range of values?			✓
3e. Do females portray a range of interests?			✓
3f. Do males portray a range of interests?			✓
3g. Do females portray a range of abilities?			✓
3h. Do males portray a range of abilities?			✓
4a. Are females presented in nontraditional occupations to illustrate the diversity of abilities?			✓
4b. Are males presented in nontraditional occupations to illustrate the diversity of abilities?			✓
5. Is preparation for an occupation described as available to individuals regardless of sex?			✓

Teacher J. A. Druart
School Des Moines Tech High School
Discipline Technical Education
Course Title Drafting I

LESSON PLAN #2

UNIT: Drafting Fundamentals

LESSON TOPIC: Orthographic Projection

OBJECTIVES:

From two given related or adjacent views of an object the student will be able to develop a third view.

INSTRUCTIONAL MEDIUM:

PRINT:

NONPRINT: Transparencies on teaching graphics

Guidelines No(s). Implemented (See pp.

Art 1 12-13)

Language 1,2,3 (See pp. 12-15)

Content

TEACHING TECHNIQUE: audio/visual and discussion

CREATIVE STRATEGY(IES) USED: Prepare own transparencies.
Avoid gender nouns.
Avoid introducting biased language.
Use general terms such as drafter.

TEACHER PREPARATION: (Specific adaptation of strategy applied to class and objective.)

The purpose of this lesson is to review material the students have covered, but also to add problems that will challenge the best students.

From the standpoint of reducing sex bias the goal is to bring the one young woman in the class into the discussion. The first step is to establish the acceptance of the young woman as a drafter.

CLASSROOM PROCEDURE:

TEACHER	STUDENT PARTICIPATION
Set up overhead, call class to attention, and begin presentation. Use commercial and teacher prepared transparencies. Involve students with open questions directed to particular students. Take care to avoid use of gender nouns and pronouns and sexist titles.	IN CLASS Participate as questions are asked concerning the overhead presentation. Direct questions to particular students only after questions directed to class do not involve all students. Discuss inequity in titles--for example, draftsman vs. drafter. OUT OF CLASS

MANAGEMENT TECHNIQUES, IF USED:

TEACHER REACTIONS:

Strategies were useable but time-consuming to find. In final analysis we as teachers can best teach equality by our own good example. Few of us, however, have had the good fortune of being taught to be fair and non-biased teachers.

SEX EQUITY CHECK SHEET

for Evaluating Print and Nonprint
Instructional Media: Vocational and Technical Education
(for Lesson Plan #2)

TITLE:

Transparencies on Teaching Graphics

Respond to each item on the check list by placing a (✓) in one of the columns on the right. Column choices include YES, NO, or NOT APPLICABLE (N/A). A check in the YES column denotes "Sex Equitable" for that item. Definitions which may clarify items contained in the check sheet follow:

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Sex Bias - prejudice based solely on sex exclusive of individual characteristics.

Sex Equitable - males and females presented in a balanced manner, impartially, showing like treatment.

(The transparencies in this set are of inanimate objects; therefore, art and content do not apply.)

ART WORK - ILLUSTRATIONS AND/OR PICTURES

	Yes	No	N/A
1. Does art work maintain a numerical balance between the sexes?			✓
2. Does art work depict alternately both females and males in dominance?			✓
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	Yes	No	N/A
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3d. Do females portray a range of values?			✓
3e. Do females portray a range of interests?			✓
3f. Do males portray a range of interests?			✓
3g. Do females portray a range of abilities?			✓
3h. Do males portray a range of abilities?			✓
4a. Are females presented in nontraditional occupations to illustrate the diversity of abilities?			✓
4b. Are males presented in nontraditional occupations to illustrate the diversity of abilities?			✓
5. Is preparation for an occupation described as available to individuals regardless of sex?			✓

Published Pursuant to PL 94-482 Sec. 133
under Curriculum Contract with
Career Education Division
Iowa Department of Public Instruction
Des Moines, Iowa

by

Vocational Education Council
Department of Home Economics Education
College of Home Economics
Iowa State University

1979, Revised 1980

Dissemination assistance has been provided by the
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IN VOCATIONAL EDUCATION
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